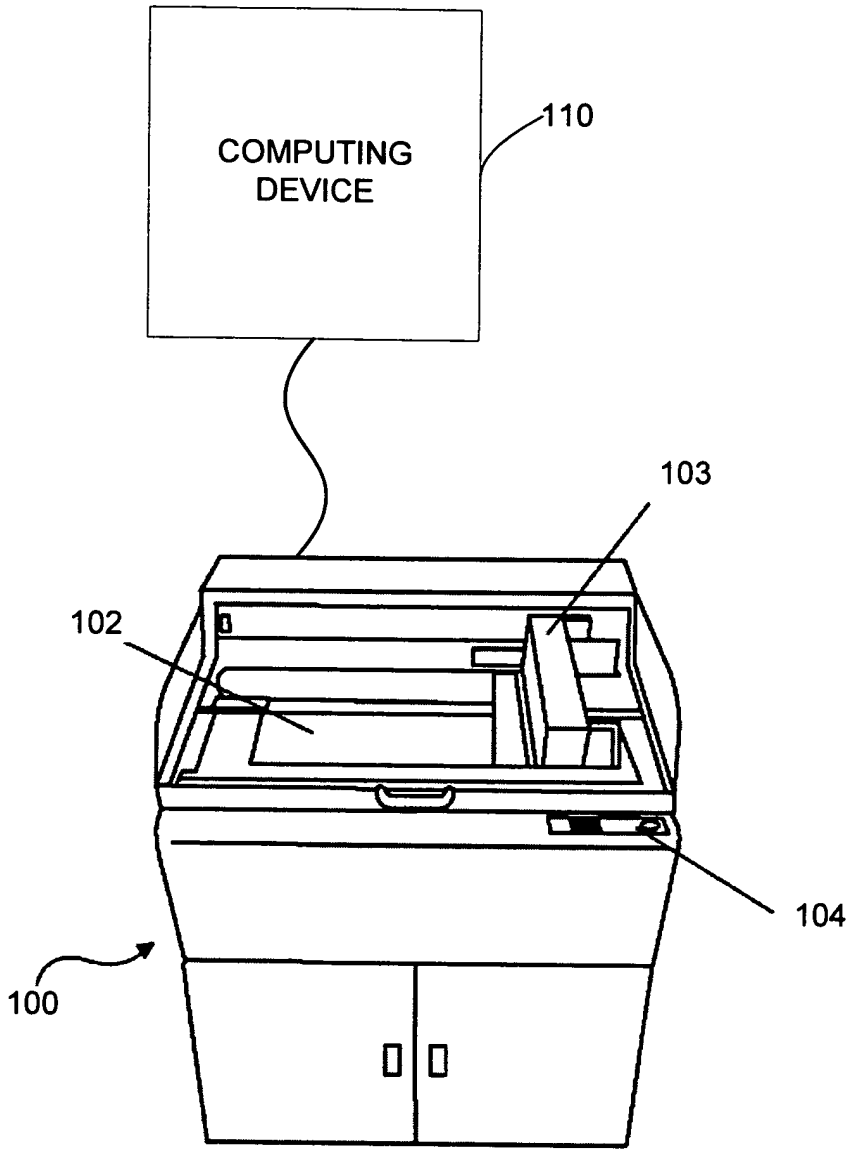


FIG. 1

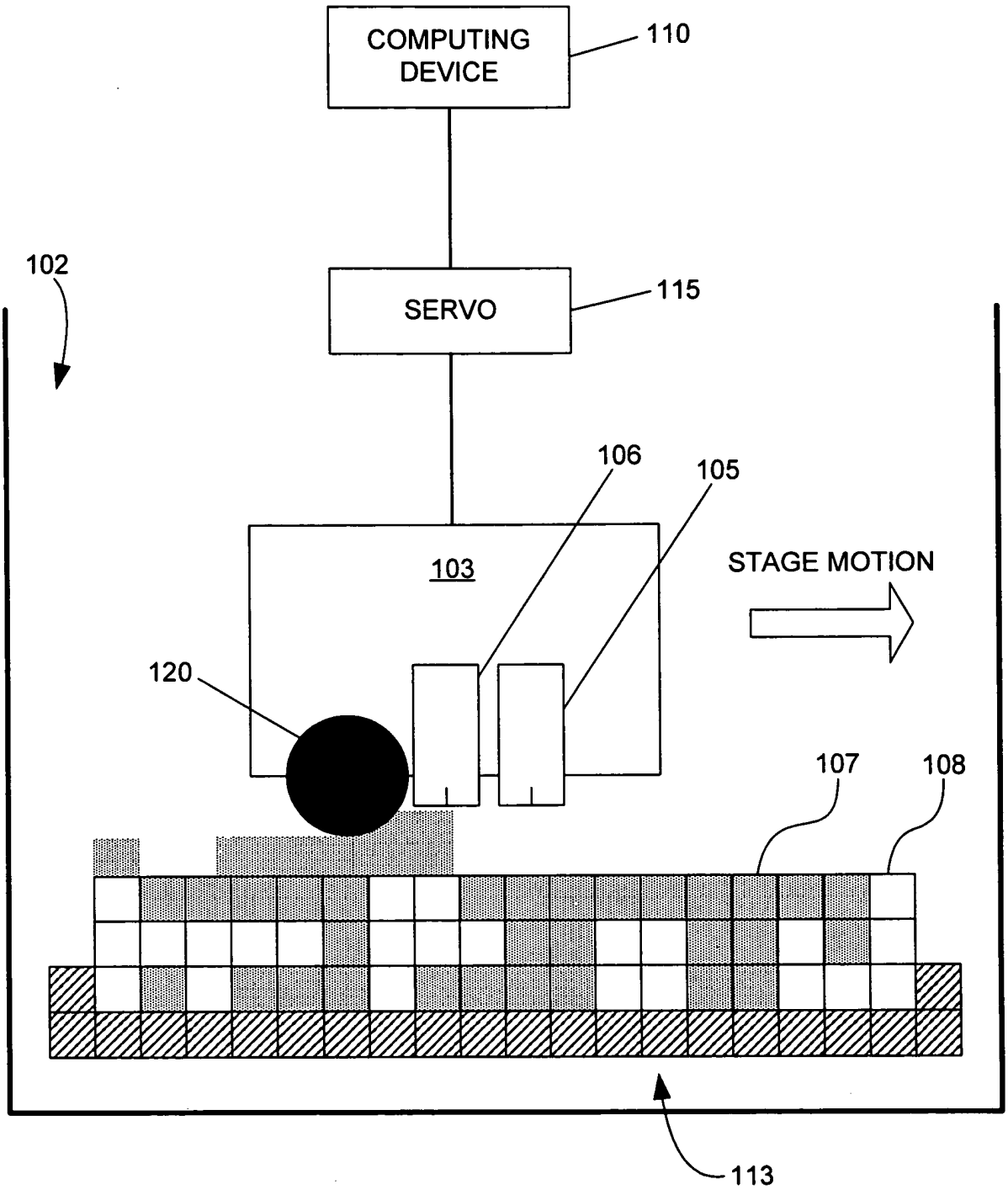

COMPUTING DEVICE
110
102
SERVO
115
106
105
103
STAGE MOTION
120
107
108
113

FIG. 2

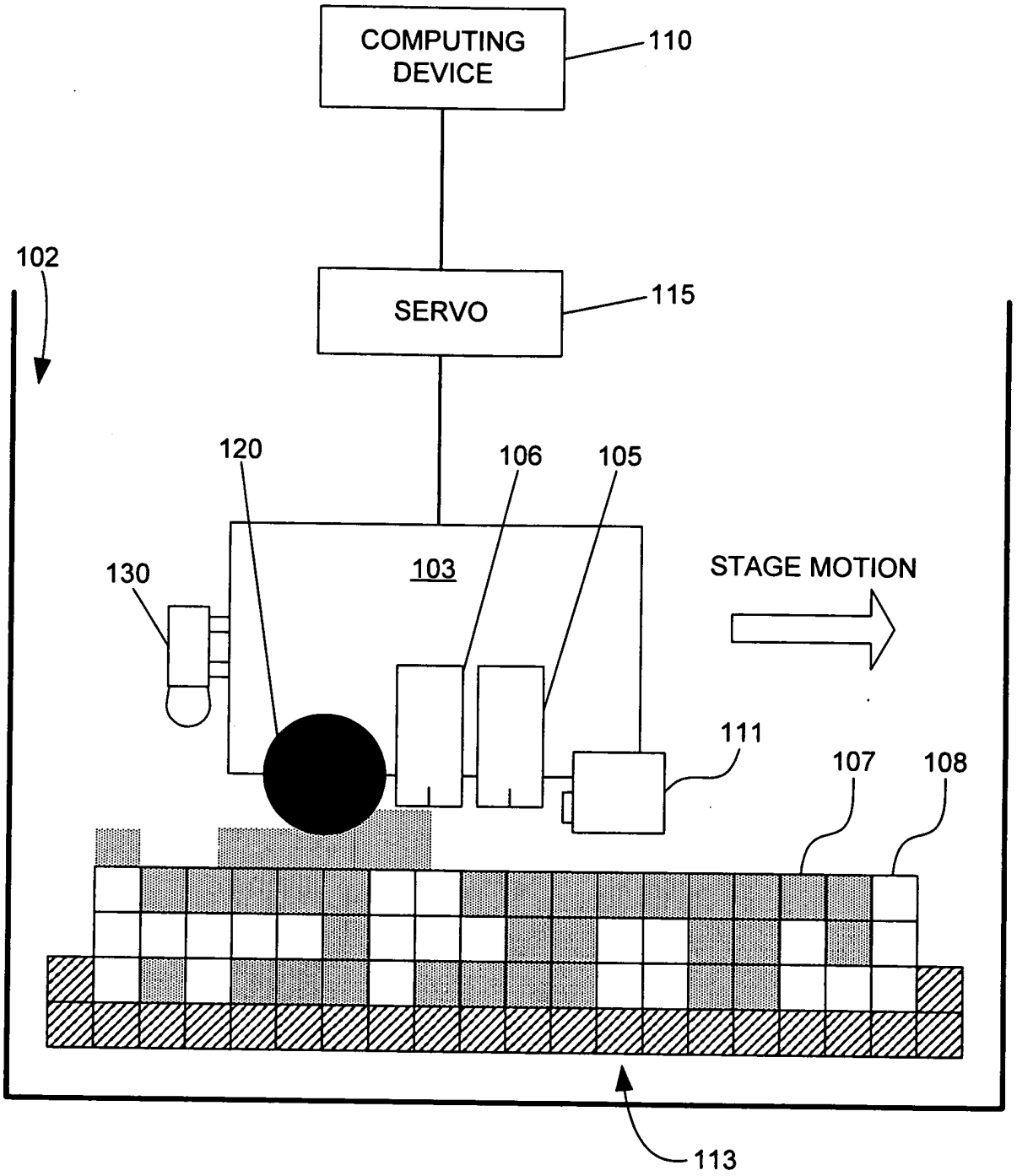

COMPUTING DEVICE
110
SERVO
115
102
120
106
105
130
103
STAGE MOTION
111
107
108
113

FIG. 3

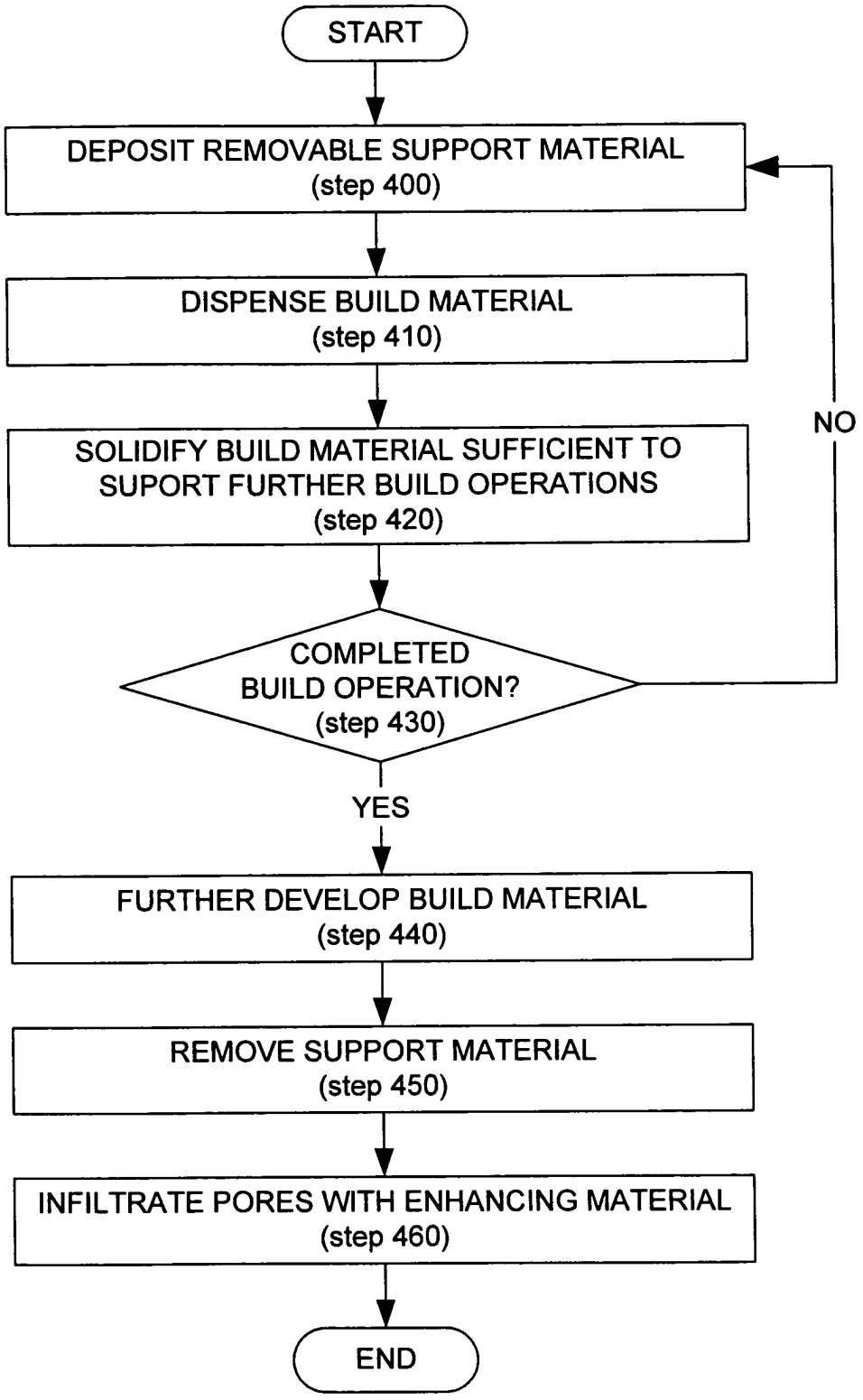

START
DEPOSIT REMOVABLE SUPPORT MATERIAL
(step 400)
DISPENSE BUILD MATERIAL
(step 410)
SOLIDIFY BUILD MATERIAL SUFFICIENT TO
SUPORT FURTHER BUILD OPERATIONS
(step 420)
COMPLETED
BUILD OPERATION?
(step 430)
NO
YES
FURTHER DEVELOP BUILD MATERIAL
(step 440)
REMOVE SUPPORT MATERIAL
(step 450)
INFILTRATE PORES WITH ENHANCING MATERIAL
(step 460)
END

FIG. 4

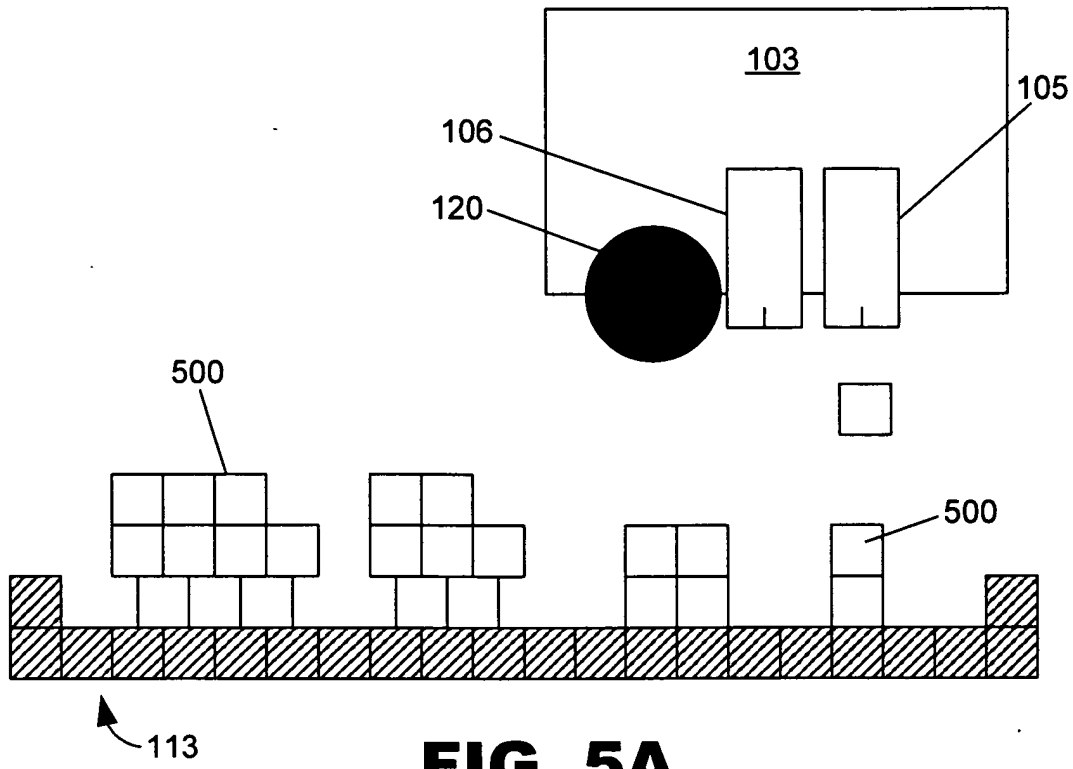


FIG. 5A

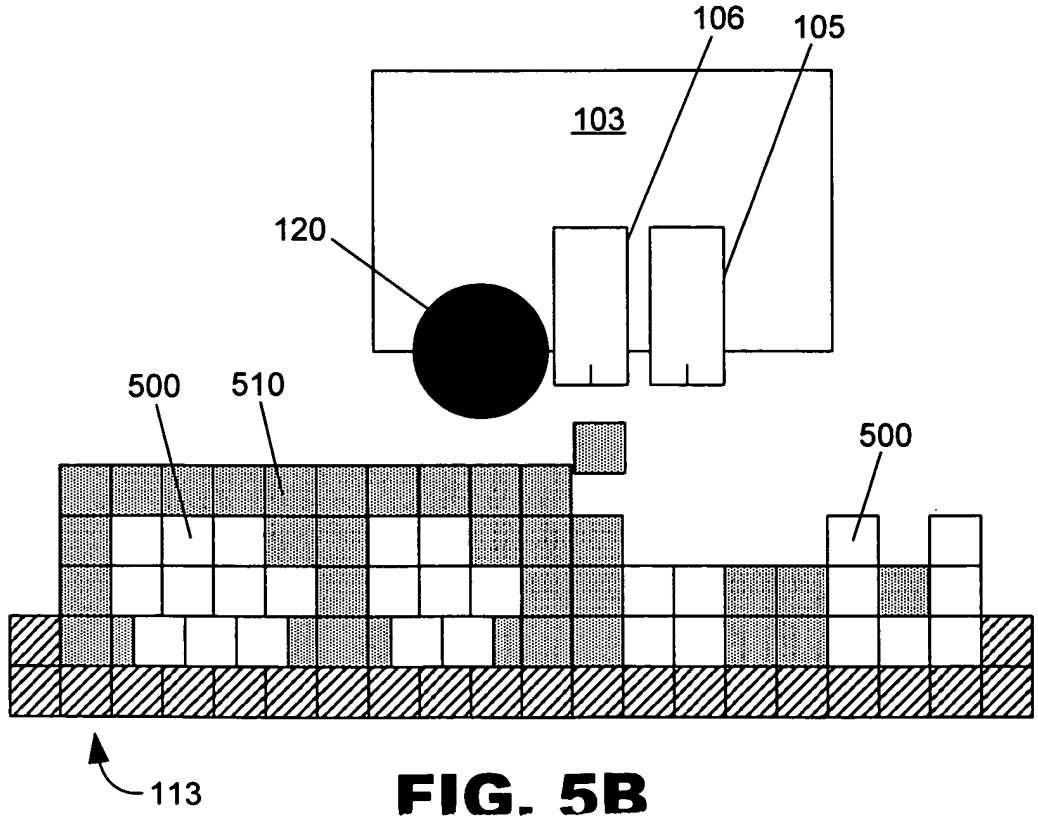


FIG. 5B

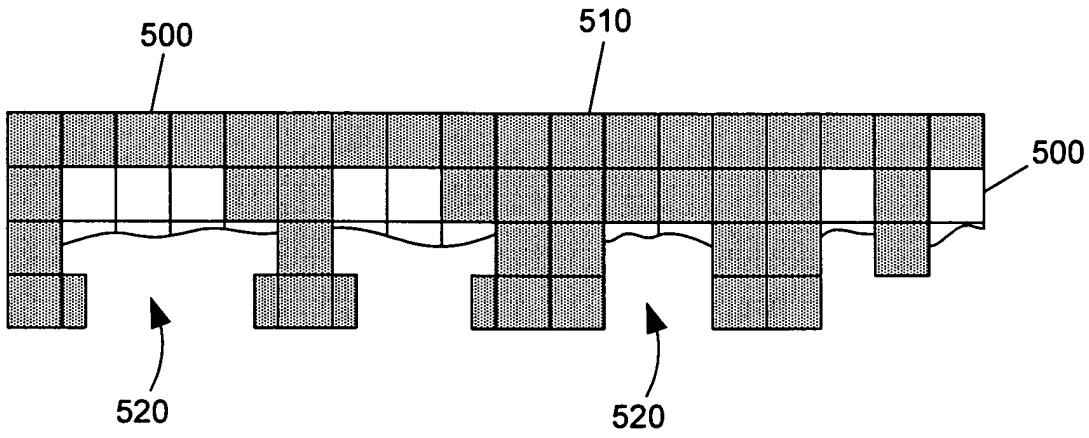


FIG. 5C

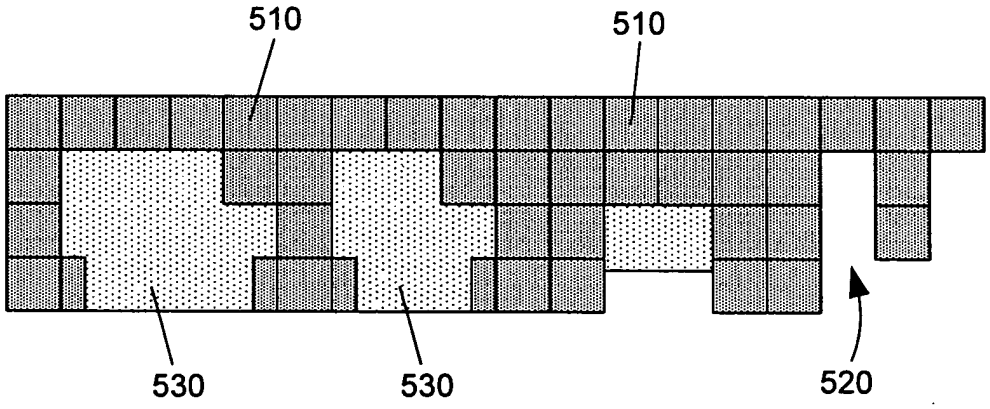


FIG. 5D

FIG. 6A

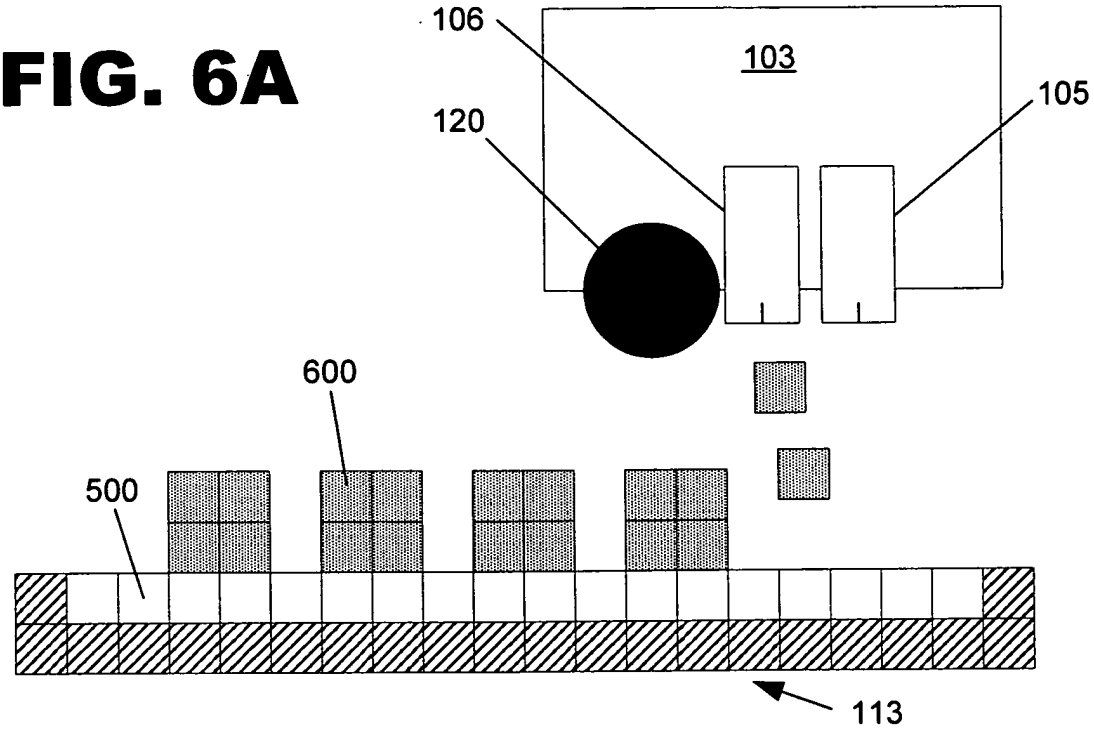
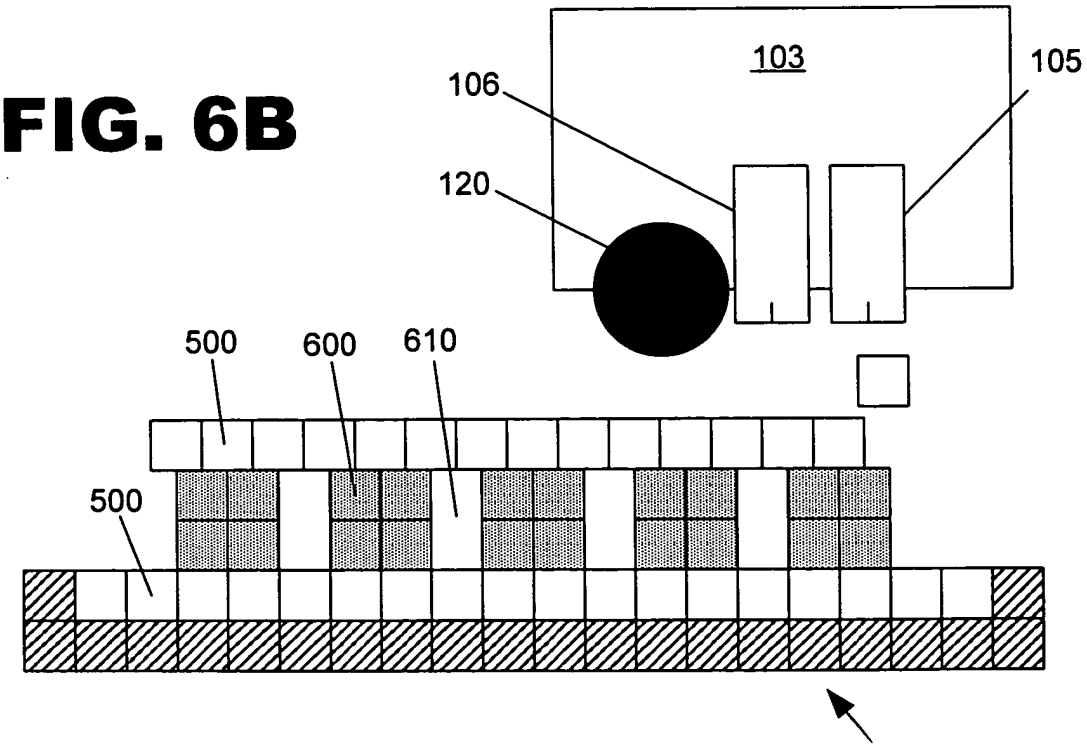


FIG. 6B



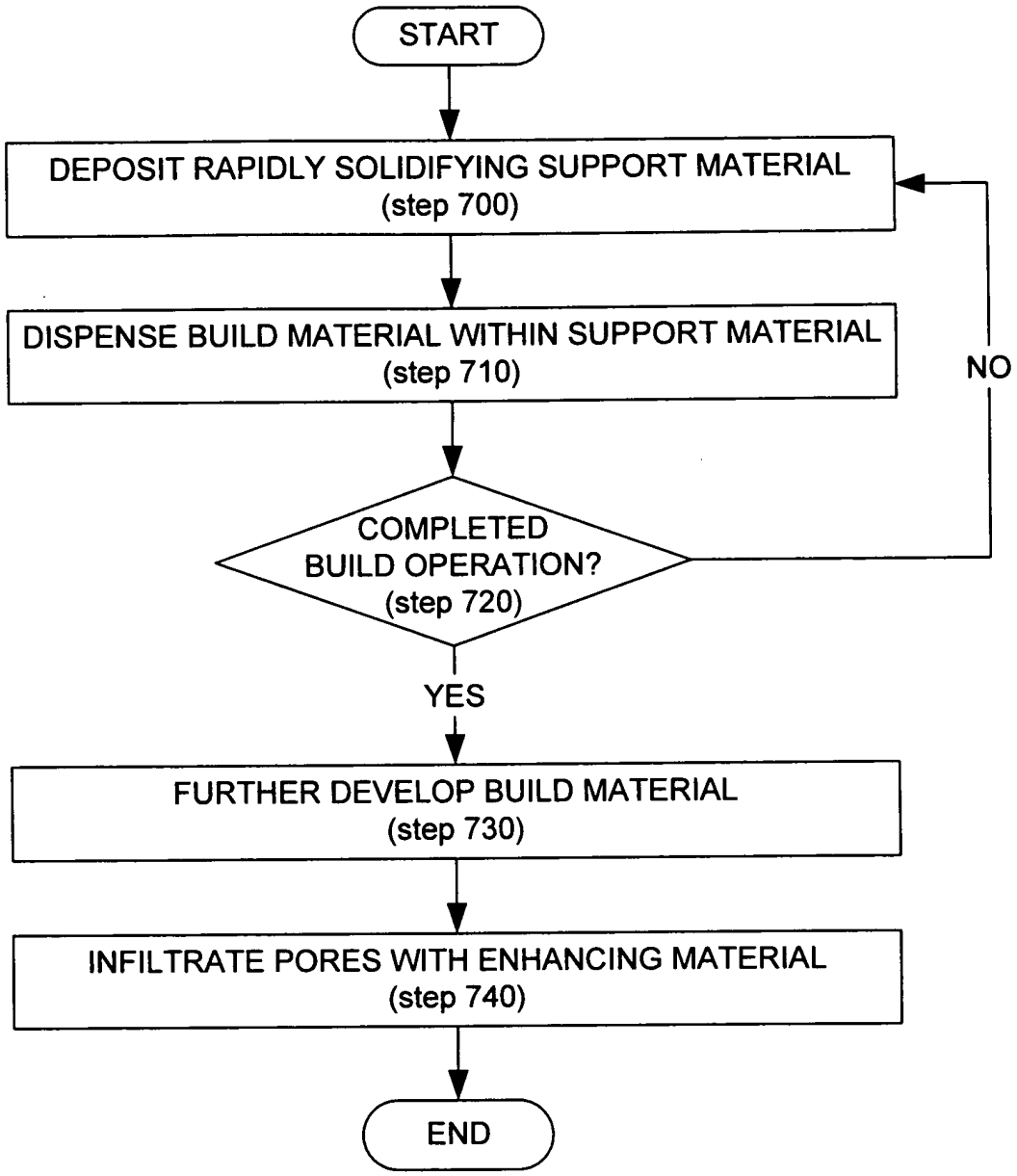

START
DEPOSIT RAPIDLY SOLIDIFYING SUPPORT MATERIAL
(step 700)
DISPENSE BUILD MATERIAL WITHIN SUPPORT MATERIAL
(step 710)
COMPLETED
BUILD OPERATION?
(step 720)
NO
YES
FURTHER DEVELOP BUILD MATERIAL
(step 730)
INFILTRATE PORES WITH ENHANCING MATERIAL
(step 740)
END

FIG. 7

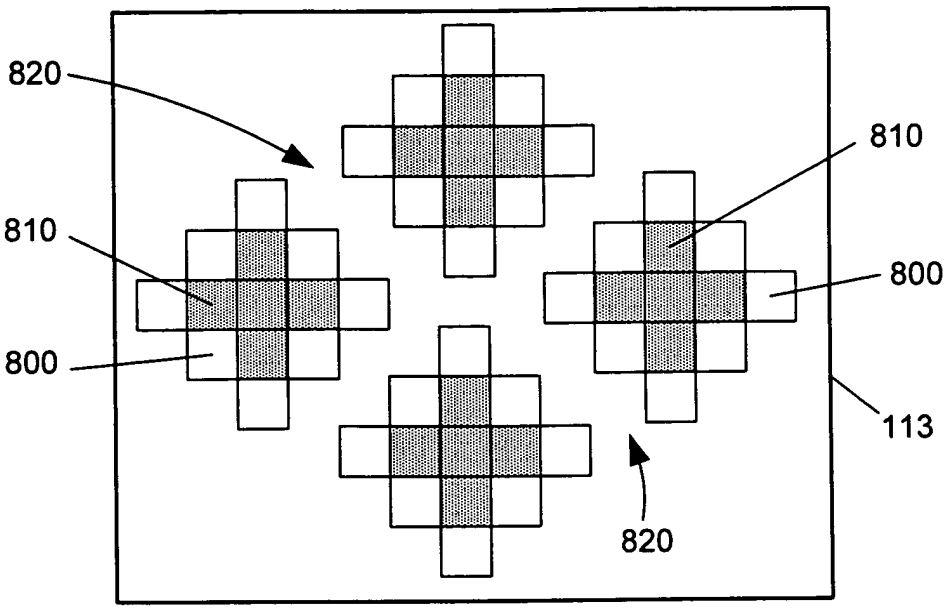


FIG. 8A

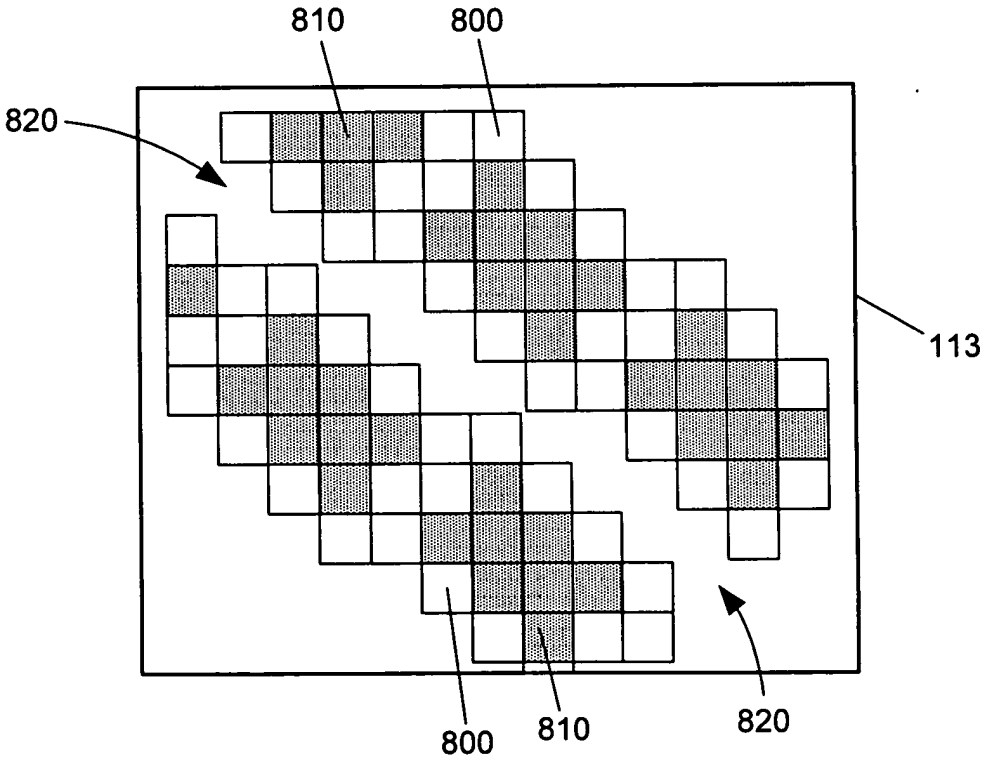


FIG. 8B

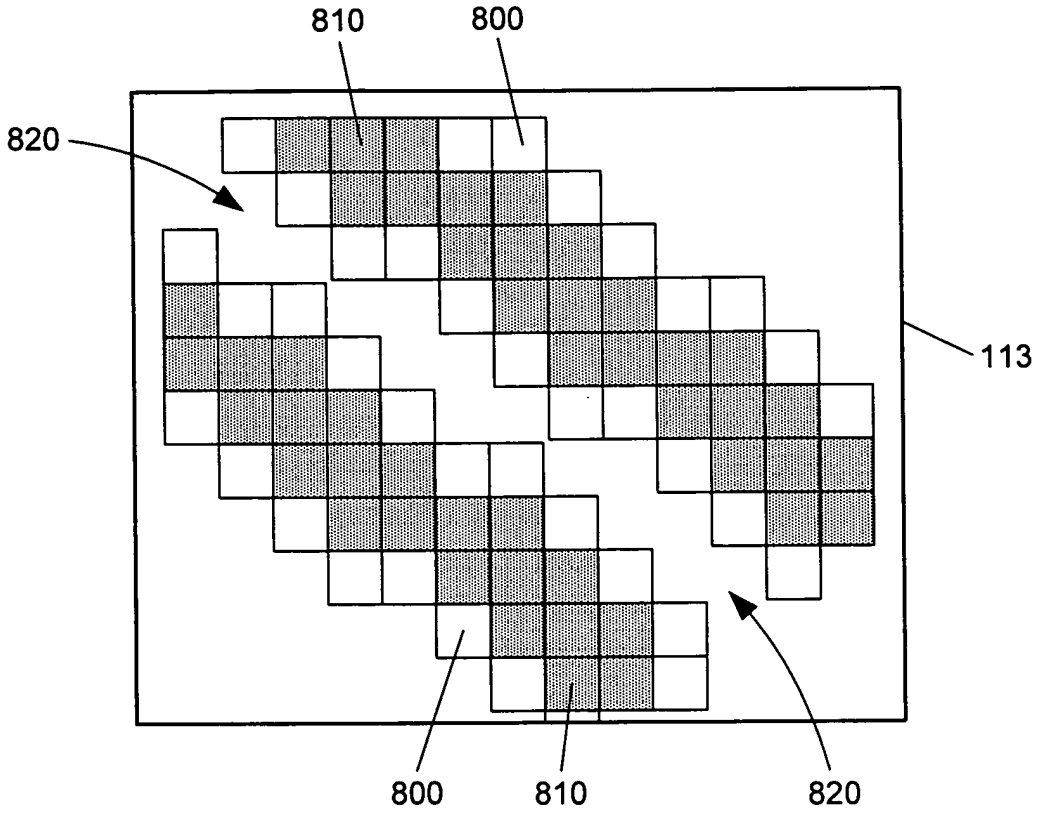


FIG. 8C